Pratt & Whitney 400 Main Street East Hartford, CT 06108

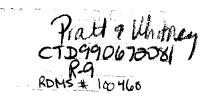


June 27, 2002

State of Connecticut
Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement & Remediation Division
79 Elm Street
Hartford, CT 06106-5127

RDMS DocID

00100460



Attn: Richard C. Hathaway, Jr., L.E.P.

**RE:** CONSENT ORDER SRD-130

UNITED TECHNOLOGIES CORPORATION

PRATT & WHITNEY DIVISION

QUARTERLY PROGRESS REPORT No. 4, JUNE 2002

Dear Mr. Hathaway:

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53-a-157b of the Connecticut General Statues and any other applicable law.

Sincerely,

UNITED TECHNOLOGIES CORPORATION PRATT & WHITNEY DIVISION

Lorin Sodell

Chief Manufacturing Engineer Director, Facilities & Services

Attachment

cc:

Lauren Levine, UTC

Brian Cutler, LEA Juan Perez, EPA



Loureiro Engineering Associates, Inc.

June 27, 2002

State of Connecticut
Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement and Remediation Bureau
79 Elm Street
Hartford, CT 06016-5127

Attn: Richard C. Hathaway, Jr., L.E.P.

RE: CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 4, JUNE 2002

Dear Mr. Hathaway:

In accordance with Paragraph B.2 of the above referenced Consent order, attached please find the progress report for the period from April 2002 to June 2002. This progress report includes a summary of those actions completed at the site as defined in Paragraph A.2 of SRD-130. In accordance with Paragraph B.8 of the above referenced Consent order, I hereby certify that:

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53-a-157b of the Connecticut General Statues and any other applicable law.

If you should have any questions or comments, please contact me or Lauren Levine of United Technologies Corporation at (860) 728-6520.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Brian A. Cutler, P.E., L.E.P.

Vice President

Attachment

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### 1. **DESCRIPTION OF ACTIVITIES**

In accordance with Paragraph B.2 of the above referenced Consent Order, this progress report has been prepared to summarize those activities that have been completed during the period from April 2002 through June 2002. As appropriate, this progress report also includes tables, figures, and drawings to support the following text. The description of activities is presented below in the same manner as presented in the Remedial Action Work Plan for the project.

### 1.1 Pre-construction activities

All pre-construction activities were completed prior to this reporting period. Pre-construction activities included Project Permits and Approvals and Engineering Design. More detailed information can be found in previous quarterly reports.

### 1.2 Construction Activities

Construction activities were initiated at the site on July 2, 2001. The following is a summary of the construction activities completed during this reporting period. A Site Plan depicting remediation areas discussed in the following parts of this Section is provided as Attachment No. 1. A final Site Plan depicting remediation areas discussed in the following parts of this Section is currently in progress and will be provided in the final summary report upon completion of the project.

### 1.2.1 Site Preparation

All site preparation activities were completed prior to this reporting period. More detailed information can be found in previous quarterly reports.

### 1.2.2 Demolition and Removal of Existing Structures

Demolition and removal activities completed during this reporting period consist of the removal of an overflow structure and wet well (DSN 003), associated with the former Process Water Facility, located east of the Oil Basin in the Lower Pond Area. Also, beginning on April 17, 2002, various sections of steel sheeting were removed that were located in the east and west ends of the Lower Pond. These materials were sampled for disposal characterization and disposed of offsite.

### 1.2.3 Contaminated Soil and Sediment Excavation and Offsite Disposal

**Upper Pond (Remediation Areas 01 through 03):** The excavations in the Upper Pond were completed during the reinstallation of the 108-inch reinforced concrete culvert in the eastern end of the Upper Pond. Excavation of soils within Area 01 and Area 02 in the vicinity of the Upper Pond was initiated on April 09, 2002. During this reporting period 509 cubic yards (611 tons) of

contaminated soil was excavated from Area 01, located east of the Upper Pond, and 517 cubic yards (620 tons) was excavated from Area 02, and removed from the site. All of this soil contained greater than 50 ppm total PCBs.

Confirmatory sampling and field (immunoassay) screening techniques were conducted throughout the excavation activities in the Upper Pond. The results of field screening resulted in the determination that contaminated soil in the Upper Pond extended laterally beyond the limits initially delineated by pre-remediation soil and sediment sampling. Confirmatory sampling and analysis through a fixed analytical laboratory was also conducted within the Upper Pond. The analytical data for the final confirmatory sampling performed in the Upper Pond is provided in Attachment No. 2. Following receipt of confirmatory data indicating that the remediation goal of less than 25 ppm PCBs was achieved, on April 12, 2002, backfilling of the Upper Pond was initiated.

Oil/Water Separator (Area 04): The Oil/Water Separator was previously located in the land bridge between the Upper and Lower sections of Willow Brook Pond. No excavation activities were performed during this reporting period. It should be noted, a portion of the diversion channel installed to divert flow around Willow Brook and Willow Brook Pond was located along the southern limits of Area 04. Sampling to characterize the north and south banks of the diversion channel was initiated on April 17, 2002 and was completed during this period. The analytical data for the final confirmatory sampling performed in the Oil/Water Separator is provided in Attachment No. 2. Backfilling and restoration in this area is ongoing.

Lower Pond (Remediation Areas 05 through 11): Excavation of soils from the Lower Pond was initiated on April 26, 2002, along the southern side of the temporary sheeting in Area 09. In addition, soil remediation of the former "oil basin" located in Area 07 was completed. The earthen berm, which differentiated the oil basin from the Lower Pond was remediated as well due to the presence of PCBs in excess of 50 ppm. During this reporting period, 2,588 cubic yards (3,107 tons) of contaminated soil was excavated from the Lower Pond areas and removed from the site. Approximately 1,374 cubic yards of this soil contained less than 50 ppm total PCBs, while the remainder (1,214 cubic yards) contained greater than 50 ppm total PCBs.

Confirmatory sampling and field (immunoassay) screening techniques were conducted throughout the excavation activities of the Lower Pond areas. The results of field screening resulted in the determination that contaminated soil in the Lower Pond extended laterally beyond the limits initially delineated by pre-remediation soil and sediment sampling. Confirmatory sampling and analysis through a fixed analytical laboratory was also conducted within the Lower Pond areas. The analytical data for the final confirmatory sampling performed in the Lower Pond areas is provided in Attachment No. 2. Following receipt of confirmatory data indicating that the remediation goal of less than 25 ppm PCBs was achieved, on May 24, 2002, backfilling within the former oil basin and capping of the Lower Pond was initiated.

Stream Channel and Wetlands (Remediation Areas 12 through 15): Excavation of soils from the Stream Channel and Wetlands was initiated on January 15, 2002, in Area 12 and continued into this reporting period. During this reporting period, 334 cubic yards (405 tons) of contaminated soil was excavated from the Stream Channel and Wetlands and removed from the site. All of this soil contained greater than 50 ppm total PCBs. The restoration of the Stream Channel and Wetlands was completed on April 11, 2002.

### 1.2.4 Construction Dewatering

As discussed in previous progress reports, dewatering of nearly all remediation areas was determined necessary to allow for the removal of soil and sediment containing PCBs at concentrations greater than 25 ppm. During this reporting period, dewatering systems located in the Stream Channel, Wetlands and the Lower Pond areas were utilized with the treatment system formerly referred to as the "wetlands treatment system". The majority of the remediation and restoration activities in the Stream Channel and Wetlands areas were complete by early April. As such, the dewatering facilities associated with the Stream Channel and Wetlands areas were dismantled and shutdown on April 3, 2002. However, construction dewatering was initiated for the remaining remediation in the Lower Pond (the southern bank in Area 09, Area 07, and the southern and western portions of Area 08) was initiated on April 8, 2002. The treatment of the groundwater generated during dewatering of these areas was treated through the treatment system previously devoted to the Stream Channel and Wetlands.

Stream Channel and Wetlands (Remediation Areas 12 through 15): As previously stated, the system for dewatering activities in the Stream Channel and Wetlands was shutdown on April 3, 2002. Discharge monitoring was completed during the reporting period in accordance with the DEP issued Emergency/Temporary Authorization (EA). The permit compliance monitoring data for the dewatering system is presented in Attachment No. 3.

Lower Pond (Remediation Areas 05 through 11): Discharge from this dewatering system to the Colt Street Wastewater Treatment Facility was initiated on April 8, 2002. The use of this system was discontinued on June 4, 2002. Discharge monitoring was completed during the reporting period in accordance with the EA. The permit compliance monitoring data for the dewatering system is presented in Attachment No. 3. Portions of the treatment system will be used in the future for decontamination wastewater treatment.

### 1.2.5 Pond/Stream Channel Cap and Engineered Control

During this reporting period, the installation of the soil and stone cap was completed in the Stream Channel. Other areas of the site where a cap was installed during this reporting period include the south bank of the Lower Pond (Areas 8 and 9) and on the north and south side of 108" RCP outlet in the Upper Pond (Area 2).

### 1.2.6 Site Restoration

During this reporting period, the restoration activities were initiated for the 108" RCP in the Upper Pond. The previously removed pipe sections were reinstalled and backfilled. The restoration of the Stream Channel shoulders that was initiated during the last reporting period was completed on April 11, 2002. These activities included fine grading, topsoiling and raking.

The restoration activities for the Wetland Area were initiated on April 19, 2002, as the biologs, which surround the perimeter of the marsh, were installed. Connecticut DEP personnel, Melissa Toni, visited the site to observe the progress of the restoration activities. Ms. Toni indicated the need for weed control in certain locations throughout the site. This activity was completed. On May 9, 2002 wetland and upland shrubs and trees were planted in the Wetland Area and along the Stream Channel banks. The willow stakes were then installed and the banks of the Wetland, Stream Channel, and Upper Pond were hydroseeded in accordance with the requirements of the permits issued by the Army Corps of Engineers and the DEP Inland Water Resources Division. On May 14, 2002 the wetland plants were installed behind the biolog and the bottom of the wetland was seeded and planted with emergent plants. The north and south banks of the Lower Pond were hydroseeded on June 11, 2002, following the placement of topsoil and rip rap along the banks of this area.

Mr. Richard Hathaway (CT DEP) visited the site on May 14, 2002 to observe the restoration and wetland mitigation activities. Mr. Juan Perez (EPA) similarly visited the site to observe the project status on June 13, 2002.

An aerial survey of the site was performed by Golden Aerial Services, Inc. on April 7, 2002. The survey was performed to document the contours within the pond, stream and wetland areas prior to reintroducing water flow therein.

### 1.2.7 Disposal Characterization Sampling

A total of 1 disposal characterization sample was collected and analyzed during this reporting period. At sample location, WT-DC-07-002, a sample was collected from a pre-existing concrete structure located immediately south of Area 07 as a means to establish disposal requirements for this material. Analytical data associated with the disposal characterization samples is discussed in Section 2 and is presented in Attachment No. 5.

### 1.2.8 Confirmatory Sampling

A total of 100 confirmatory soil samples (47 composite samples and 53 grab samples) were collected from the Lower Pond, the Oil/Water Separator and the Upper Pond during this reporting period. The confirmatory samples were collected and analyzed in accordance with the Remedial Action Work Plan. Analytical data associated with the confirmatory samples are discussed in Section 2 and are presented in Attachment No. 2.

### 2. DATA PRESENTATION

In previous sections of this progress report, mention has been made to the collection and analysis of a variety of samples. This section presents a summary of the analytical data received during this reporting period. The section is formatted to present the analytical data in the order in which it is provided in the attachments.

Attachment No. 2 Confirmatory Soil Sampling Analytical Data: During the period from April 1, 2002 to June 30, 2002, numerous confirmatory soil samples were obtained from throughout the remedial excavation surfaces within the Lower Pond, the Oil/Water Separator and the Upper Pond. Drawings 1 through 3 in Attachment No. 2 present the general limits of remedial excavation and the areas within which confirmatory samples were collected. Detailed drawings exhibiting the actual excavation contours and sample locations will be provided in the final summary report.

In accordance with the RAWP, both grab and composite confirmatory sampling was performed throughout the remediation process. Grab sampling is intended to demonstrate compliance with the State of Connecticut Remediation Standard Regulation for PCBs and other constituents of concern, which includes metals, VOCs, SVOCs, TPH and cyanide. Composite sampling is intended to demonstrate compliance with the remedial objective of 25 ppm PCBs within the areas designated for capping.

For ease in assessing this data, the composite analytical data is presented separately from the grab sample data. A summary of the sampling and analytical information for the final confirmatory soil grab samples is provided as Table 1 in Attachment No. 2 and a summary of the constituents detected is presented as Table 2. A summary of the sampling and analytical information for the final confirmatory soil composite samples is provided as Table 3 in Attachment No. 2 and a summary of the constituents detected is presented as Table 4.

In some cases, the confirmatory soil samples obtained for compliance demonstration exceeded the applicable criteria. For those instances for which exceedances were located within the remediation project limits, the respective areas were re-excavated and resampled. The analytical data representing the excavated soil is not included in the above referenced data sets as the representative soil has been excavated and disposed of at an off-site facility. The limits of excavation completed to date are, however at or beyond the limits defined for this project in the RAWP. As such, the data set in Attachment No. 2 is the final data set for this particular progress report.

Attachment No. 3 Dewatering Wastewater Analytical Data: As previously stated, the system for dewatering activities in the Stream Channel and Wetlands was shutdown on April 3, 2002. Discharge from the Lower Pond dewatering activities was initiated on April 8, 2002. In accordance with the EA, this discharge was monitored on a weekly basis for the presence of VOCs and PCBs. An exceedance of the applicable pollutant limits was encountered during the

compliance monitoring performed on April 25, 2002. Upon receipt of the analytical data on May 1, 2002 the system was immediately shutdown and discharge ceased. As a result, mitigative measures were implemented on the treatment system and the system was restarted on May 4, 2002. A copy of the letter notifying CT DEP of the exceedance and subsequent shutdown of the treatment system is provided as Attachment No. 4.

Though not required by the permit, analysis for zinc was also performed until May 18, 2002, to assess if the discharge could be routed directly to Willow Brook, rather than to the Colt Street facility. The concentration of zinc in the effluent from the dewatering system was consistently in excess of the limits for discharge to Willow Brook. As such, the discharge continued to be routed to the Colt Street facility in accordance with the terms and conditions of the EA. The use of this system was temporarily discontinued on June 4, 2002.

A summary of the sampling and analytical information for compliance monitoring is presented as Table 1 in Attachment No. 3. A summary of the constituents detected in the combined effluent is provided as Table 2 in Attachment No. 3.

Attachment No. 4 EA Exceedance Notification: As described above, an exceedance of the EA limits was encountered during the April 25, 2002 monitoring event. A copy of the notification letter forwarded to the CT DEP is included in Attachment No. 4. This document details the corrective measures implemented to mitigate future exceedances.

Attachment No. 5 Disposal Characterization Sampling Analytical Data: A summary of the single disposal characterization sample collected during this reporting period is provided as Table 1 in Attachment No. 5. A summary of the constituents detected in the disposal characterization sample is provided as Table 2 in Attachment No. 5.

The sludge sample was collected from a pre-existing concrete structure within Remediation Area 07. The sample was analyzed for PCBs, VOCs (zero head extraction method), metals (TCLP), reactivity, corrosivity and ignitability, for the purposes of verifying disposal requirements for the materials. The sample was found to contain elevated levels of PCBs at 1,050 ppm and trace levels of TCLP metals including barium, chromium (total), and lead.

### 3. REMEDIAL ACTION WORK PLAN

During this reporting period, DEP issued an approval of the Revised Remedial Action Work Plan dated January 2002.

### 4. PLANNED ACTIVITIES

Planned activities during the next reporting period from July 2002 through the completion of the project include:

- Completion of the soil relocation to the engineered control area.
- Preparation of the Oil/Water Separator Area for capping.
- Restoring the Oil/Water Separator Area with 3' of fill over the cap including top soil, seed and mulch.
- Requesting authorization for alternative decontamination procedure for the sheeting through EPA.
- Requesting CT DEP authorization to modify the EA treatment process to facilitate the pre-treatment of the decontamination wastewater with discharge to the Colt Street Treatment facility.
- Decontamination of the sheeting and heavy equipment departing from the site.
- Completing installation of the perimeter fence.

Construction activities will be completed by June 28, 2002. Miscellaneous landscaping and demobilization of construction equipment will continue into the month of July 2002.

Attachment No. 1
Site Plan

### US EPA New England RCRA Document Management System Image Target Sheet

	460
Facility Name: <u>PRATT &amp; V</u>	WHITNEY MAIN STREET
Facility ID#: <u>CTD99067208</u>	31
Phase Classification: <u>R-9</u>	
Purpose of Target Sheet:	
[X] Oversized (in Site File)	[ ] Oversized (in Map Drawer)
[ ] Page(s) Missing (Plea	se Specify Below)
[ ] Privileged	Other (Provide Purpose Below)
Description of Oversized M  ATTACHMENT NO. 1: SI	, ••

<sup>\*</sup> Please Contact the EPA New England RCRA Records Center to View This Document \*

# Attachment No. 2 Confirmatory Soil Sampling Analytical Data and Excavation Limits and Sample Location Maps

# Table 1 SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data



Loureiro Engineering Associates, Inc.

	Sample	e Information		Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Sample Interval (ft) Class	LEAVolatiles	LEAVolatiles						Miscellaneou Analyses
WT-CS-01-001	2002372	04/11/2002	SS		Х	х			X	X	x
WT-CS-01-002	2002373	04/11/2002	SS		X	X			X	X	X
WT-CS-01-003	2002374	04/11/2002	SS		Х	X			Х	X	X
WT-CS-01-004	2002375	04/11/2002	SS		x	X			X	X	X
WT-CS-02-068	2002368	04/09/2002	SS		х	X			Х	X	X
WT-CS-02-070	2002370	04/09/2002	SS		X	X			X	X	X
WT-CS-02-071	2002384	04/11/2002	SS			·			X		
WT-CS-02-073	2002379	04/11/2002	SS						х	<u> </u>	
WT-CS-02-075	2002381	04/11/2002	SS						х	x	
WT-CS-02-077	2002383	04/11/2002	SS						X		
WT-CS-04-118	2002391	04/17/2002	SS			X			X		
WT-CS-04-120	2002393	04/17/2002	SS			X			X		x
WT-CS-04-122	2002395	04/17/2002	SS			X			X		x
WT-CS-04-124	2002399	04/22/2002	SS						Х	<u>                                     </u>	
WT-CS-07-001	2002385	04/17/2002	SS		X	X			X	X	X
WT-CS-07-002	2002386	04/17/2002	SS		X	X			X	X	X
WT-CS-07-003	2002387	04/17/2002	SS		Х	X			X	X	X
WT-CS-07-004	2002388	04/17/2002	SS		х	X			X	X	x
WT-CS-07-005	2002389	04/17/2002	SS		Х	X			х	X	х
WT-CS-07-006	2002401	04/24/2002	SS			<del> </del>			X		
WT-CS-07-007	2002402	04/24/2002	SS						x		
WT-CS-07-008	2002403	04/24/2002	SS						X		
WT-CS-07-009	2002404	04/24/2002	SS			<del> </del>			X		
WT-CS-07-011	2002433	05/24/2002	SS		X	х			х	X	x
WT-CS-07-013	2002437	05/28/2002	SS		Х	X			х	X	x
WT-CS-07-015	2002441	05/29/2002	SS		X	X			X	X	X
WT-CS-07-017	2002443	05/29/2002	SS		X	X			X	X	X
WT-CS-07-017	2002444	05/29/2002	SS		X	X			X	X	X
WT-CS-07-019	2002446	05/29/2002	SS		x	X			X	X	X
WT-CS-07-021	2002448	05/29/2002	SS		x	х			X	X	X
WT-CS-07-023	2002450	05/29/2002	SS		X	X			X	X	X
WT-CS-07-026	2002460	05/30/2002	SS		X	X			х	X	x
WT-CS-07-028	2002462	05/30/2002	SS		х	х			x	X	x
		OX 7-7HF d-Thermal I								Page	1 of 2

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected Printed on 06/17/2002

# Table 1 SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data



Loureiro Engineering Associates, Inc

	Sample	e Information				Analysis I	nformation			
Location ID	Sample ID	Sample Date	Sampled Sampled Interval (ft)	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
WT-CS-07-030	2002498	06/10/2002	SS	 х	X		<del></del>	X	X	X
WT-CS-07-031	2002499	06/10/2002	SS	х	X			X	X	x
WT-CS-07-032	2002500	06/10/2002	SS	х	X			X	X	x
WT-CS-07-033	2002501	06/10/2002	SS	х	X			Х	X	X
WT-CS-09-067	2002408	05/22/2002	SS	 х	x			х	X	x
WT-CS-09-069	2002410	05/22/2002	SS	х	X			X	X	X
WT-CS-09-071	2002412	05/22/2002	SS	х	X	,		X	X	X
WT-CS-09-077	2002464	05/30/2002	SS	X	X			X	X	X
WT-CS-09-079	2002466	05/30/2002	SS	х	Х			X	X	X
WT-CS-09-081	2002468	05/30/2002	SS	 х	х			X	X	X
WT-CS-09-083	2002470	05/30/2002	SS	х	X			X	X	X
WT-CS-09-085	2002472	05/30/2002	SS	х	X			X	X	X
WT-CS-09-087	2002474	05/30/2002	SS	 х	X			X	X	X
WT-CS-09-089	2002476	05/30/2002	SS	 х	X			X	X	X
WT-CS-09-091	2002478	05/30/2002	SS	х	X			X	X	X
WT-CS-09-091	2002479	05/30/2002	SS	х	X			X	X	X
WT-CS-09-093	2002481	05/30/2002	SS	x	X			X	X	X
WT-CS-09-095	2002483	05/30/2002	SS	 х	X			X	X	X
WT-CS-09-097	2002485	05/30/2002	SS	 х	X			x	X	x
WT-CS-09-099	2002487	05/30/2002	SS	х	X			X	Х	X

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected Printed on 06/17/2002

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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

							eiro Engineering	Associates, Inc.
	Location ID	WT-CS-01-001	WT-CS-01-002	WT-CS-01-003	WT-CS-01-004	WT-CS-02-068	WT-CS-02-070	WT-CS-02-071
	Sample ID	2002372	2002373	2002374	2002375	2002368	2002370	2002384
	Sample Date	04/11/2002	04/11/2002	04/11/2002	04/11/2002	04/09/2002	04/09/2002	04/11/2002
	Sample Time	10:00	10:05	10:15	10:25	15:15	15:25	15:50
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E204503-1A	E204503-2A	E204503-3A	E204503-4A	E204450-3A	E204450-5A	E204529-8
Constituent	Units							
Date PCBs Analyzed	-	04/11/2002	04/12/2002	04/11/2002	04/12/2002	04/11/2002	04/11/2002	04/12/2002
Date Metals Analyzed	-	04/16/2002	04/16/2002	04/16/2002	04/16/2002	04/12/2002	04/12/2002	
Date Organics Analyzed	-							
Date Physical Analyzed	-		04/12/2002	04/12/2002	04/12/2002	04/11/2002	04/11/2002	
Date Semi-volatile Organics Analyzed	-	1	04/16/2002	04/15/2002	04/15/2002	04/15/2002	04/16/2002	
Arsenic	mg/kg	1.6	2.2	4.3	3.0	5.2	14	
Barium	mg/kg	11	34	51	39	320 J	480 J	
Cadmium	mg/kg		5.9	8.9	2.7	45	100	
Chromium, Total	mg/kg	6.4	130	210	78	1000 J	3100 J	
Copper	mg/kg	5.5	54	75	40	300 J	2700 J	
Lead	mg/kg	2.3	74	140	51	490 J	980 J	
Mercury	mg/kg		0.76	0.44	0.26	4.6 J	13 J	
Nickel	mg/kg	14	140	140	57	1400 J	1900 J	
Selenium	mg/kg					T-100		
Silver	mg/kg	E.(1)	3.5	4.5	1.5	33	99	-
Zinc	mg/kg	11	65	90	50	330 J	790 J	
PCB-1248 (Arochlor 1248)	ug/kg		110000				98000	
PCB-1254 (Arochlor 1254)	ug/kg	120 J	110000	17000	4800	58000	64000	180
PCB-1260 (Arochlor 1260)	ug/kg							
Cyanide	mg/kg		1.7			9.3 J	11 J	
Total Petroleum Hydrocarbons EPA 418.1	mg/kg		22000	740	450	82000 J	51000 J	
2-Methylnaphthalene	ug/kg					3800		
Acenaphthene	ug/kg		760				9700	
Anthracene	ug/kg						17000	
Benzo(a)anthracene	ug/kg		1700	740	690	<del> </del>	40000	
Benzo(a)pyrene	ug/kg		1300	790	730	<u> </u>	30000	
Benzo(b)fluoranthene	ug/kg		1200	1200	1000		47000	
Benzo(g,h,i)perylene	ug/kg			360	270		8800	
Benzo(k)fluoranthene	ug/kg		1300	420	400		14000	
		<del> </del>		-			+	

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					Loure		
	1		1			1	WT-CS-02-071
			i	1		į.	2002384
			1	04/11/2002	04/09/2002	i	04/11/2002
Sample Time			10:15	1	15:15	i e	15:50
Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
Lab. Number	E204503-1A	E204503-2A	E204503-3A	E204503-4A	E204450-3A	E204450-5A	E204529-8
Units				Ī			
ug/kg						7800	
ug/kg		2100	880	730	2400	43000	
ug/kg	-						
ug/kg				1			
ug/kg		6300	1600	1500	5400	100000	
ug/kg		1000		· · · · · · · · · · · · · · · · · · ·		11000	
ug/kg			330	270		9400	
ug/kg							
ug/kg		1000	810	690	4800	82000	
ug/kg		7700	1200	1100	4400	76000	
ug/kg		4400			8000	14000	
ug/kg							
ug/kg							
				+			
					-		
	<del> </del>			1			
					<u> </u>	-	
			<u> </u>	<del> </del>			
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				+	-		
			-			<u> </u>	
		-		-			-
	Lab. Number Units  ug/kg  ug/kg	Sample ID 2002372 Sample Date 04/11/2002 Sample Time 10:00 Laboratory PREM Lab. Number E204503-1A Units ug/kg	Sample ID   2002372   2002373     Sample Date   04/11/2002   04/11/2002     Sample Time   10:00   10:05     Laboratory   PREM   PREM     Lab. Number   E204503-1A   E204503-2A     Units   ug/kg   2100     ug/kg   ug/kg   6300     ug/kg   ug/kg   1000     ug/kg   ug/kg   ug/kg   ug/kg     ug/kg   ug/kg   1000     ug/kg   ug/kg   7700     ug/kg   ug/kg   4400     ug/kg   ug/kg   ug/kg   4400     ug/kg   ug/kg   4400     ug/kg   ug/kg   ug/kg   4400     ug/kg   ug/kg   4400     ug/kg   ug/kg   ug/kg   4400     ug/kg   ug/kg   ug/kg   ug/kg   4400     ug/kg   ug/kg   ug/kg   ug/kg   ug/kg   ug/kg     ug/kg   ug/kg   ug/kg   ug/kg   ug/kg   ug/kg     ug/kg   ug/kg   ug/kg   ug/kg   ug/kg   ug/kg   ug/kg     ug/kg	Sample ID         2002372         2002373         2002374           Sample Date         04/11/2002         04/11/2002         04/11/2002           Sample Time         10:00         10:05         10:15           Laboratory         PREM         PREM         PREM           Lab. Number         E204503-1A         E204503-2A         E204503-3A           Units         Units         E204503-2A         E204503-3A           Ug/kg         2100         880           ug/kg         04/11/2002         1600           ug/kg         1000         1600           ug/kg         1000         1000           ug/kg         1000         810           ug/kg         1000         1200           ug/kg         4400         1200	Sample ID         2002372         2002373         2002374         2002375           Sample Date         04/11/2002         04/11/2002         04/11/2002         04/11/2002           Sample Time         10:00         10:05         10:15         10:25           Laboratory         PREM         PREM         PREM         PREM           Lab. Number         E204503-1A         E204503-2A         E204503-3A         E204503-4A           Units         Ug/kg         2100         880         730           ug/kg         2100         880         730           ug/kg         1000         1500           ug/kg         1000         1500           ug/kg         330         270           ug/kg         1000         810         690           ug/kg         7700         1200         1100           ug/kg         4400         4400         1000         1000	Location ID   WT-CS-01-001   WT-CS-01-002   WT-CS-01-003   WT-CS-01-004   WT-CS-02-068	Sample ID         2002372         2002373         2002374         2002375         2002368         2002370           Sample Date         04/11/2002         04/11/2002         04/11/2002         04/11/2002         04/09/2002         04/09/2002           Sample Time         10:00         10:05         10:15         10:25         15:15         15:25           Laboratory         PREM         PREM         PREM         PREM         PREM         PREM           Lab. Number         E204503-1A         E204503-2A         E204503-3A         E204503-4A         E204450-3A         E204450-5A           Units         Ug/kg         2100         880         730         2400         43000           ug/kg         2100         880         730         2400         43000           ug/kg         6300         1600         1500         5400         100000           ug/kg         1000         330         270         9400           ug/kg         1000         810         690         4800         82000           ug/kg         7700         1200         1100         4400         76000           ug/kg         4400         8000         14000

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		~					eiro Engineering	
	Location ID	WT-CS-02-077	WT-CS-04-118	WT-CS-04-122	WT-CS-07-001	WT-CS-07-002	WT-CS-07-003	WT-CS-07-004
	Sample ID	2002383	2002391	2002395	2002385	2002386	2002387	2002388
	Sample Date	04/11/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002
	Sample Time		11:15	11:50	09:30	10:00	10:30	10:40
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E204529-7	E204704-7	E204704-11	E204704-1A	E204704-2A	E204704-3A	E204704-4A
Constituent	Units							
Date PCBs Analyzed	-	04/12/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002	04/18/2002	04/18/2002
Date Metals Analyzed	-				04/19/2002	04/19/2002	04/19/2002	04/19/2002
Date Organics Analyzed	-	1						
Date Physical Analyzed	-	1			04/19/2002	04/19/2002	04/19/2002	
Date Semi-volatile Organics Analyzed	-		04/20/2002	04/20/2002	04/20/2002	04/20/2002	04/20/2002	04/20/2002
Arsenic	mg/kg				2.4 J	2.5 J	2.5 J	3.6 J
Barium	mg/kg				38	30	32	34
Cadmium	mg/kg				0.75	0.52	0.87	0.51
Chromium, Total	mg/kg	1			37	30	65	170
Соррег	mg/kg				22	19	49	41
Lead	mg/kg				27 J	23 J	45 J	44 J
Mercury	mg/kg				0.30	0.16	0.20	0.15
Nickel	mg/kg				16	13	19	16
Selenium	mg/kg							
Silver	mg/kg				0.84	0.52	1.0	2.0
Zinc	mg/kg				39	33	50	40
PCB-1248 (Arochlor 1248)	ug/kg		490		1600	870	4900	18000
PCB-1254 (Arochlor 1254)	ug/kg	16000	780	63	1900 J	1400	1600	5300
PCB-1260 (Arochlor 1260)	ug/kg	<b>†</b>	190		830	500	430	1200
Cyanide	mg/kg	1						
Total Petroleum Hydrocarbons EPA 418.1	mg/kg				600	300	320	
2-Methylnaphthalene	ug/kg							
Acenaphthene	ug/kg	1				-		
Anthracene	ug/kg		270				450	360
Benzo(a)anthracene	ug/kg	1	670	390		340	950	910
Benzo(a)pyrene	ug/kg	<b>†</b>	660	410		330	960	920
Benzo(b)fluoranthene	ug/kg	-	870	540		420	1200	1200
Benzo(g,h,i)perylene	ug/kg		190	+	1		330	360
Benzo(k)fluoranthene	ug/kg	-	290				430	370

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	Location ID	WT CC 03 022	TUT CC 04 110	WT CC 04 133	WT CC 07 001	LOUI C	TUT CC 07 003	Associates, Inc
	{ ·	WT-CS-02-077	WT-CS-04-118	WT-CS-04-122	WT-CS-07-001	WT-CS-07-002	WT-CS-07-003	WT-CS-07-004
	Sample ID	2002383	2002391	2002395	2002385	2002386	2002387	2002388
	Sample Date	04/11/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002
	Sample Time	15:45	11:15	11:50	09:30	10:00	10:30	10:40
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E204529-7	E204704-7	E204704-11	E204704-1A	E204704-2A	E204704-3A	E204704-4A
Constituent	Units							
Carbazole	ug/kg						330	190
Chrysene	ug/kg	1	710	440		370	1000	940
Dibenz(a,h)anthracene	ug/kg							
Dibenzofuran	ug/kg							
Fluoranthene	ug/kg		1500	860	290 J	840	2400	2300
Fluorene	ug/kg						200	
Indeno(1,2,3-c,d)pyrene	ug/kg	<u> </u>					360	
Naphthalene	ug/kg	- <del> </del>						
Phenanthrene	ug/kg		860	470		540	1700	1500
Pyrene	ug/kg		1000	650	220 J	600	1700	1700
bis(2-ethylhexyl) Phthalate	ug/kg		230					
M,p-xylene (sum Of Isomers)	ug/kg							
o-Xylene (1,2-dimethylbenzene)	ug/kg							
				+				
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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, inc. Location ID WT-CS-07-005 WT-CS-07-006 WT-CS-07-008 WT-CS-07-009 WT-CS-07-011 WT-CS-07-013 WT-CS-07-015 Sample ID 2002389 2002401 2002403 2002404 2002433 2002437 2002441 Sample Date 04/17/2002 05/29/2002 04/24/2002 04/24/2002 04/24/2002 05/24/2002 05/28/2002 Sample Time 13:00 11:30 12:10 12:25 16:55 13:20 11:36 Laboratory PREM PREM PREM PREM PREM PREM PREM Lab. Number E204704-5A E205B11-2A E204946-1 E204946-3 E204946-4 E205B21-3A E205B64-3A Units Constituent Date PCBs Analyzed 04/25/2002 04/25/2002 04/25/2002 05/30/2002 04/19/2002 05/30/2002 Date Metals Analyzed 05/30/2002 05/30/2002 Date Organics Analyzed Date Physical Analyzed 05/30/2002 Date Semi-volatile Organics Analyzed 04/20/2002 05/29/2002 06/03/2002 1.7 Arsenic mg/kg Barium mg/kg 41 6.7 6.5 4.5 mg/kg Cadmium Chromium, Total mg/kg 5.3 3.2 4.4 2600 2.0 2.3 550 mg/kg Copper 4.4 J 230 0.96 1.0 Lead mg/kg 0.21 Mercury mg/kg Nickel mg/kg 8.3 3.6 3.4 25 mg/kg Selenium mg/kg 0.72 Silver 47 mg/kg 12 Zinc 5.1 7.0 PCB-1248 (Arochlor 1248) ug/kg 12000 PCB-1254 (Arochlor 1254) ug/kg 62 140 22000 PCB-1260 (Arochlor 1260) ug/kg Cyanide mg/kg Total Petroleum Hydrocarbons EPA 418.1 mg/kg 33000 49000 2-Methylnaphthalene ug/kg 180000 Acenaphthene ug/kg Anthracene ug/kg 65000 Benzo(a)anthracene ug/kg ug/kg Benzo(a)pyrene Benzo(b)fluoranthene ug/kg Benzo(g,h,i)perylene ug/kg Benzo(k)fluoranthene ug/kg

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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

	Location ID	Turn de oa oor	TUT CO AT ACC	MIT CO OT OCC	WE GO AT ACC	LOUIE	eiro Engineering WT-CS-07-013	TWT CC AT AL
		WT-CS-07-005	WT-CS-07-006	WT-CS-07-008	WT-CS-07-009	WT-CS-07-011		WT-CS-07-01:
	Sample ID	2002389	2002401	2002403	2002404	2002433	2002437	2002441
	Sample Date	04/17/2002	04/24/2002	04/24/2002	04/24/2002	05/24/2002	05/28/2002	05/29/2002
	Sample Time	13:00	11:30	12:10	12:25	16:55	13:20	11:36
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E204704-5A	E204946-1	E204946-3	E204946-4	E205B11-2A	E205B21-3A	E205B64-3A
Constituent	Units				,			
Carbazole	ug/kg							
Chrysene	ug/kg							56000
Dibenz(a,h)anthracene	ug/kg							
Dibenzofuran	ug/kg							
Fluoranthene	ug/kg							330000
Fluorene	ug/kg							100000
ndeno(1,2,3-c,d)pyrene	ug/kg							
Naphthalene	ug/kg							
Phenanthrene	ug/kg							370000
Pyrene	ug/kg							230000
ois(2-ethylhexyl) Phthalate	ug/kg	470					310	
M,p-xylene (sum Of Isomers)	ug/kg							
o-Xylene (1,2-dimethylbenzene)	ug/kg			<del>                                     </del>				
				1			1	
		<b> </b>				-	+	
				-				
				<del></del>				
				-				1
				<del>                                     </del>	<del>                                     </del>			
				<del> </del>			+	<del> </del>
				-	-		+	
						<del>-</del>	-	
		<b></b>			<del> </del>			-
					-			-
							+	1

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		Loureiro Engineering As								
	Location ID	WT-CS-07-015	WT-CS-07-017	WT-CS-07-017	WT-CS-07-017	WT-CS-07-017	WT-CS-07-019	WT-CS-07-021		
	Sample ID	2002441	2002443	2002443	2002444	2002444	2002446	2002448		
	Sample Date	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002		
	Sample Time	11:36	11:46	11:46	11:48	11:48	11:59	13:00		
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM		
	Lab. Number	E205B64-3B	E205B64-5A	E205B64-5B	E205B64-6A	E205B64-6B	E205B64-8A	E205B64-10A		
Constituent	Units									
Date PCBs Analyzed	-		05/30/2002		05/30/2002		05/30/2002	05/30/2002		
Date Metals Analyzed	-		05/30/2002		05/30/2002		05/30/2002	05/30/2002		
Date Organics Analyzed	-	05/30/2002		05/30/2002		05/30/2002				
Date Physical Analyzed	-		05/30/2002		05/30/2002		05/30/2002	05/30/2002		
Date Semi-volatile Organics Analyzed	-		06/01/2002		06/04/2002		06/01/2002			
Arsenic	mg/kg		0.74		0.61		0.96			
Barium	mg/kg		18		17		27	25		
Cadmium	mg/kg	•					0.64	6.2		
Chromium, Total	mg/kg		12		9.6		83	52000		
Copper	mg/kg		6.4		6.0		28	8400		
Lead	mg/kg		4.6		3.2		22	2700		
Mercury	mg/kg						0.20	0.065		
Nickel	mg/kg		48		48		16	150		
Selenium	mg/kg									
Silver	mg/kg		<del> </del>				1.0	5.2		
Zinc	mg/kg		50		51		26			
PCB-1248 (Arochlor 1248)	ug/kg		31000 J		53000 J		57000			
PCB-1254 (Arochlor 1254)	ug/kg		30000 J		54000 J		51000	4000		
PCB-1260 (Arochlor 1260)	ug/kg	1	4300 J		7500 J		9300			
Cyanide	mg/kg							7.3		
Total Petroleum Hydrocarbons EPA 418.1	mg/kg		20000		31000		32000	7700		
2-Methylnaphthalene	ug/kg		8600		26000					
Acenaphthene	ug/kg		5500		11000					
Anthracene	ug/kg				2100					
Benzo(a)anthracene	ug/kg		2100		3300		2900			
Benzo(a)pyrene	ug/kg				1900					
Benzo(b)fluoranthene	ug/kg	<del>                                     </del>			2400		3100			
Benzo(g,h,i)perylene	ug/kg									
Benzo(k)fluoranthene	ug/kg						2400	-		
				1		+				

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Loureiro Engineering Associates, Inc

						Loure	eiro Engineering	Associates, inc.
_	Location ID	WT-CS-07-015	WT-CS-07-017	WT-CS-07-017	WT-CS-07-017	WT-CS-07-017	WT-CS-07-019	WT-CS-07-021
	Sample ID	2002441	2002443	2002443	2002444	2002444	2002446	2002448
	Sample Date	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002
	Sample Time	11:36	11:46	11:46	11:48	11:48	11:59	13:00
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E205B64-3B	E205B64-5A	E205B64-5B	E205B64-6A	E205B64-6B	E205B64-8A	E205B64-10A
Constituent	Units							
Carbazole	ug/kg							
Chrysene	ug/kg		2100		3100		2800	
Dibenz(a,h)anthracene	ug/kg							
Dibenzofuran	ug/kg				5200			
Fluoranthene	ug/kg		10000		16000		6100	
Fluorene	ug/kg		3600		6500			
Indeno(1,2,3-c,d)pyrene	ug/kg							
Naphthalene	ug/kg		5300		9300	-		
Phenanthrene	ug/kg		12000		20000		3100	
Pyrene	ug/kg		8600		14000		10000	
bis(2-ethylhexyl) Phthalate	ug/kg		3500		5100		9400	
M,p-xylene (sum Of Isomers)	ug/kg	310		270		280		
o-Xylene (1,2-dimethylbenzene)	ug/kg							1
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### Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

	Loureiro Engineering Associates,												
	Location ID	WT-CS-07-023	WT-CS-07-023	WT-CS-07-026	WT-CS-07-028	WT-CS-07-030	WT-CS-07-031	WT-CS-07-032					
	Sample ID	2002450	2002450	2002460	2002462	2002498	2002499	2002500					
	Sample Date	05/29/2002	05/29/2002	05/30/2002	05/30/2002	06/10/2002	06/10/2002	06/10/2002					
	Sample Time	13:09	13:09	14:10	14:22	13:00	13:10	13:20					
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM					
	Lab. Number	E205B64-12A	E205B64-12B	E205C78-2A	E205C78-4A	E206406-1A	E206406-2A	E206406-3A					
Constituent	Units												
Date PCBs Analyzed	<u> </u>	05/30/2002				06/11/2002	06/11/2002	06/11/2002					
Date Metals Analyzed	-	05/30/2002		06/04/2002	06/04/2002	06/13/2002	06/13/2002	06/13/2002					
Date Organics Analyzed	-		05/30/2002										
Date Physical Analyzed	-	05/30/2002				06/13/2002							
Date Semi-volatile Organics Analyzed	-	06/03/2002		06/03/2002		06/13/2002	06/13/2002	06/13/2002					
Arsenic	mg/kg	8.1											
Barium	mg/kg	32		14 J	8.0 J	23	14	16					
Cadmium	mg/kg	12				0.78	0.32	0.24					
Chromium, Total	mg/kg	10000		4.3	3.3	31	17	13					
Соррег	mg/kg	2900		1.0	1.5	25	16	8.8					
Lead	mg/kg	680		1.1	1.0	15	7.9	6.1					
Mercury	mg/kg	0.19				0.50	0.40	0.13					
Nickel	mg/kg	6500		2.7	3.7	25	26	19					
Selenium	mg/kg												
Silver	mg/kg	30				1.3	0.50	0.14					
Zinc	mg/kg	120		3.3	4.1	43	20	18					
PCB-1248 (Arochlor 1248)	ug/kg					640	250						
PCB-1254 (Arochlor 1254)	ug/kg	250000				820	420	410					
PCB-1260 (Arochlor 1260)	ug/kg					210	130						
Cyanide	mg/kg	10											
Total Petroleum Hydrocarbons EPA 418.1	mg/kg	58000				320							
2-Methylnaphthalene	ug/kg												
Acenaphthene	ug/kg					THE RESIDENCE OF STREET, STREE							
Anthracene	ug/kg					220							
Benzo(a)anthracene	ug/kg					940	620						
Benzo(a)pyrene	ug/kg					780	590						
Benzo(b)fluoranthene	ug/kg					800	580						
Benzo(g,h,i)perylene	ug/kg					480	390						
Benzo(k)fluoranthene	ug/kg					700	580						
	<u> </u>	<u></u>											

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		Loureiro Engineering Associates										
	Location ID	WT-CS-07-023	WT-CS-07-023	WT-CS-07-026	WT-CS-07-028	WT-CS-07-030	WT-CS-07-031	WT-CS-07-032				
	Sample ID	2002450	2002450	2002460	2002462	2002498	2002499	2002500				
	Sample Date	05/29/2002	05/29/2002	05/30/2002	05/30/2002	06/10/2002	06/10/2002	06/10/2002				
	Sample Time	13:09	13:09	14:10	14:22	13:00	13:10	13:20				
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM				
	Lab. Number	E205B64-12A	E205B64-12B	E205C78-2A	E205C78-4A	E206406-1A	E206406-2A	E206406-3A				
Constituent	Units											
Carbazole	ug/kg											
Chrysene	ug/kg					960	710					
Dibenz(a,h)anthracene	ug/kg	1	!									
Dibenzofuran	ug/kg											
luoranthene	ug/kg			350 J		2400	1400	390				
luorene	ug/kg			-		<del>                                     </del>						
ndeno(1,2,3-c,d)pyrene	ug/kg		:			460	370					
Vaphthalene	ug/kg											
henanthrene	ug/kg	26000				980	840					
утепе	ug/kg	· · · · · · · · · · · · · · · · · · ·		290 J		1800	1200	320				
is(2-ethylhexyl) Phthalate	ug/kg											
M,p-xylene (sum Of Isomers)	ug/kg	· · · · · · · · · · · · · · · · · · ·	150	-								
-Xylene (1,2-dimethylbenzene)	ug/kg		120									
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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc. Location ID WT-CS-07-033 WT-CS-09-067 WT-CS-09-069 WT-CS-09-071 WT-CS-09-077 WT-CS-09-077 WT-CS-09-079 Sample ID 2002501 2002408 2002410 2002412 2002464 2002464 2002466 Sample Date 06/10/2002 05/22/2002 05/22/2002 05/22/2002 05/30/2002 05/30/2002 05/30/2002 13:30 13.17 13:23 14:45 14:45 14:53 Sample Time 13:12 PREM PREM Laboratory. PREM PREM PREM PREM PREM E205C73-4A Lab. Number E206406-4A E205928-4A E205928-6A E205C73-2A E205C73-2B E205928-2A Units Constituent 06/11/2002 05/23/2002 05/23/2002 06/03/2002 06/03/2002 Date PCBs Analyzed 06/13/2002 05/24/2002 05/24/2002 05/24/2002 06/04/2002 06/04/2002 Date Metals Analyzed 06/02/2002 Date Organics Analyzed 06/13/2002 05/23/2002 05/23/2002 06/04/2002 06/04/2002 Date Physical Analyzed 06/13/2002 06/04/2002 06/03/2002 05/24/2002 05/24/2002 Date Semi-volatile Organics Analyzed 7.2 5.3 2.0 Arsenic mg/kg 6.5 37 55 7.5 960 58 mg/kg Barium 0.56 4.8 97 18 260 mg/kg Cadmium 21 950 27000 100000 Chromium, Total mg/kg 4.9 3100 15 120 mg/kg 1.1 1400 4000 19000 Copper 19 1.1 110 1300 3300 2300 mg/kg Lead 0.24 51 2.2 0.099 mg/kg 0.66 Mercury 100 1500 3400 6200 Nickel mg/kg 2.7 mg/kg 3.0 Selenium 29 mg/kg 0.88 150 49 Silver 16 84 24 1300 140 Zinc mg/kg 3.8 9400 280000 PCB-1248 (Arochlor 1248) ug/kg 690 9300 290000 140000 1200 PCB-1254 (Arochlor 1254) ug/kg 170 2900 44000 PCB-1260 (Arochlor 1260) ug/kg 10 25 Cyanide mg/kg 21 77000 3000 mg/kg 220 12000 170000 Total Petroleum Hydrocarbons EPA 418.1 29000 ug/kg 2-Methylnaphthalene 39000 1800 Acenaphthene ug/kg 1800 70000 Anthracene ug/kg 5200 ug/kg 7400 13000 90000 Benzo(a)anthracene ug/kg 6200 10000 59000 Benzo(a)pyrene 6800 8800 60000 ug/kg Benzo(b)fluoranthene 3600 7000 ug/kg Benzo(g,h,i)perylene ug/kg 5000 7900 58000 Benzo(k)fluoranthene

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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

		Loureiro Engineering Associates, i											
	Location ID	WT-CS-07-033	WT-CS-09-067	WT-CS-09-069	WT-CS-09-071	WT-CS-09-077	WT-CS-09-077	WT-CS-09-079					
	Sample ID	2002501	2002408	2002410	2002412	2002464	2002464	2002466					
	Sample Date	06/10/2002	05/22/2002	05/22/2002	05/22/2002	05/30/2002	05/30/2002	05/30/2002					
	Sample Time	13:30	13:12	13:17	13:23	14:45	14:45	14:53					
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM					
	Lab. Number	E206406-4A	E205928-2A	E205928-4A	E205928-6A	E205C73-2A	E205C73-2B	E205C73-4A					
Constituent	Units												
Carbazole	ug/kg	1800		4300		38000							
Chrysene	ug/kg	8600		14000		89000							
Dibenz(a,h)anthracene	ug/kg	1400											
Dibenzofuran	ug/kg												
Fluoranthene	ug/kg	18000		34000	24000	260000		1000					
Fluorene	ug/kg			3900		53000		900					
Indeno(1,2,3-c,d)pyrene	ug/kg	3500		6800									
Naphthalene	ug/kg					43000							
Phenanthrene	ug/kg	11000		25000		320000		2300					
Pyrene	ug/kg	14000		26000		200000		620					
ois(2-ethylhexyl) Phthalate	ug/kg												
M,p-xylene (sum Of Isomers)	ug/kg						380						
o-Xylene (1,2-dimethylbenzene)	ug/kg						260						
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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

	Location ID	WT-CS-09-081	WT-CS-09-083	WT-CS-09-085	WT-CS-09-087	WT-CS-09-089	WT-CS-09-091	Associates, Ir
	Sample ID	2002468	2002470	2002472	2002474	2002476	2002478	2002479
		05/30/2002			i			05/30/2002
	Sample Date		05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002	16:53
	Sample Time	15:06	15:20	15:36	15:46	16:14	16:51	
	Laboratory	PREM						
	Lab. Number	E205C73-6A	E205C73-8A	E205C73-10A	E205C73-12A	E205C73-14A	E205C73-16A	E205C73-17A
Constituent	Units	<u></u>						
Date PCBs Analyzed	-	06/03/2002	06/03/2002	06/03/2002	06/03/2002	06/03/2002	06/04/2002	06/03/2002
Date Metals Analyzed	-	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002
Date Organics Analyzed								
Date Physical Analyzed	-	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002
Date Semi-volatile Organics Analyzed	-		06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/05/2002	06/04/2002
Arsenic	mg/kg	1.9	4.5		5.5	1.0	1.1	1.1
Barium	mg/kg	39	67	30	84	32	18	18
Cadmium	mg/kg	330	160	360	8.1	0.49	0.19	0.29
Chromium, Total	mg/kg	120000	86000	82000	690	68	9.0	11
Copper	mg/kg	18000	16000	20000	160	24	8.6	9.8
Lead	mg/kg	4700	2400	700	280	46	8.4	8.8
Mercury	mg/kg	0.096	0.22	0.098	3.2	0.18	0.024	0.032
Nickel	mg/kg	7300	9500	5800	210	15	8.9	14
Selenium	mg/kg							
Silver	mg/kg	68	30	28	45			0.60
Zinc	mg/kg		11		160	81	16	17
PCB-1248 (Arochlor 1248)	ug/kg				56000			
PCB-1254 (Arochlor 1254)	ug/kg	3600	1000	48000	85000	150	1300 J	250 J
PCB-1260 (Arochlor 1260)	ug/kg		<del> </del>		37000		340 J	
Cyanide	mg/kg	4.2	12	14	1.8			
Total Petroleum Hydrocarbons EPA 418.1	mg/kg	57000	5500	24000	53000	520	430	380
-Methylnaphthalene	ug/kg		-		+	<del> </del>		<del>                                     </del>
Acenaphthene	ug/kg		1300					+
Anthracene	ug/kg		500					
Benzo(a)anthracene	ug/kg	-	860	+	6200		420	420
Benzo(a)pyrene	ug/kg		770		1220		420	440
Benzo(b)fluoranthene	ug/kg		680				370	360
Benzo(g,h,i)perylene	ug/kg		480	<del> </del>		<del></del>	290	310
			630			-	340	350
Benzo(k)fluoranthene	ug/kg		030				J#U	330

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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

						Loure	iro Engineering	g Associates, Inc.
	Location ID	WT-CS-09-081	WT-CS-09-083	WT-CS-09-085	WT-CS-09-087	WT-CS-09-089	WT-CS-09-091	WT-CS-09-091
	Sample ID	2002468	2002470	2002472	2002474	2002476	2002478	2002479
	Sample Date	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002
	Sample Time	15:06	15:20	15:36	15:46	16:14	16:51	16:53
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E205C73-6A	E205C73-8A	E205C73-10A	E205C73-12A	E205C73-14A	E205C73-16A	E205C73-17A
Constituent	Units							
Carbazole	ug/kg							
Chrysene	ug/kg		950		7200		440	440
Dibenz(a,h)anthracene	ug/kg							
Dibenzofuran	ug/kg							
Fluoranthene	ug/kg		2000		15000	210	870	910
Fluorene	ug/kg		910	800				
Indeno(1,2,3-c,d)pyrene	ug/kg		430				260	260
Naphthalene	ug/kg							
Phenanthrene	ug/kg		1500				550	560
Pyrene	ug/kg		2000		13000		760	780
bis(2-ethylhexyl) Phthalate	ug/kg				23000			
M,p-xylene (sum Of Isomers)	ug/kg							
o-Xylene (1,2-dimethylbenzene)	ug/kg							
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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

						Loureiro Engineering Associates, Inc.
	Location ID	WT-CS-09-093	WT-CS-09-095	WT-CS-09-097	WT-CS-09-099	
	Sample ID	2002481	2002483	2002485	2002487	
	Sample Date	05/30/2002	05/30/2002	05/30/2002	05/30/2002	
	Sample Time	17:05	17:21	17:26	17:36	
	Laboratory	PREM	PREM	PREM	PREM	
	Lab. Number	E205C82-2A	E205C82-4A	E205C82-6A	E205C82-8A	
Constituent	Units					
Date PCBs Analyzed	-	05/31/2002	06/03/2002		06/01/2002	
Date Metals Analyzed	-	06/04/2002	06/04/2002	06/04/2002	06/04/2002	
Date Organics Analyzed	•	1				
Date Physical Analyzed	-	06/04/2002	06/04/2002	-	06/04/2002	
Date Semi-volatile Organics Analyzed	-	06/04/2002	06/05/2002	06/04/2002	06/05/2002	
Arsenic	mg/kg	2.7	2.0	<del>                                     </del>	1.8	
Barium	mg/kg	29	28	22	66	
Cadmium	mg/kg	0.86	0.72		5.8	
Chromium, Total	mg/kg	55	86	6.7	300	
Copper	mg/kg	27	26	9.3	100	
Lead	mg/kg	41	21	5.7	180	
Mercury	mg/kg	0.19	0.16	0.028	2.8	
Nickel	mg/kg	20	14	8.4	100	
Selenium	mg/kg					
Silver	mg/kg	1.2	0.66		24	
Zinc	mg/kg	44	51	14	140	
PCB-1248 (Arochlor 1248)	ug/kg					
PCB-1254 (Arochlor 1254)	ug/kg	720	260		7800	
PCB-1260 (Arochlor 1260)	ug/kg	260				
Cyanide	mg/kg					
Total Petroleum Hydrocarbons EPA 418.1	mg/kg	290	5400		2000	
2-Methylnaphthalene	ug/kg		600			
Acenaphthene	ug/kg					
Anthracene	ug/kg	250	710		1900	
Benzo(a)anthracene	ug/kg	840	1100	240	8000	
Benzo(a)pyrene	ug/kg	800	970	220	7900	
Benzo(b)fluoranthene	ug/kg	880	840		7500	
Benzo(g,h,i)perylene	ug/kg	260	580	-	5400	
Benzo(k)fluoranthene	ug/kg	740	900		7400	
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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc. Location ID WT-CS-09-095 WT-CS-09-097 WT-CS-09-099 WT-CS-09-093 Sample ID 2002481 2002483 2002485 2002487 Sample Date 05/30/2002 05/30/2002 05/30/2002 05/30/2002 17:05 17:21 Sample Time 17:26 17:36 Laboratory PREM PREM PREM PREM Lab. Number E205C82-2A E205C82-4A E205C82-6A E205C82-8A Units Constituent Carbazole ug/kg 1700 940 ug/kg 1200 240 8800 Chrysene ug/kg 2000 Dibenz(a,h)anthracene Dibenzofuran ug/kg 1900 Fluoranthene ug/kg 2800 520 20000 Fluorene ug/kg 600 ug/kg 280 5100 Indeno(1,2,3-c,d)pyrene ug/kg Naphthalene Phenanthrene ug/kg 880 3000 260 9800 1500 2400 390 15000 ug/kg Pyrene bis(2-ethylhexyl) Phthalate ug/kg ug/kg M,p-xylene (sum Of Isomers) o-Xylene (1,2-dimethylbenzene) ug/kg

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### Table 3

### SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION



### Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling

Data

	Sample	e Information	<u> </u>		Analysis Information							
Location ID	Sample ID	Sample Date		mple ass LEAVolatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses	
WT-CS-02-066	2002366	04/09/2002	S	SC					X			
WT-CS-02-067	2002367	04/09/2002	S	SC					X			
WT-CS-02-069	2002369	04/09/2002	S	SC					X		1	
WT-CS-02-071	2002377	04/11/2002	S	SC					X			
WT-CS-02-072	2002378	04/11/2002	S	SC					X		1	
WT-CS-02-074	2002380	04/11/2002	S	SC					Χ			
WT-CS-02-076	2002382	04/11/2002	S	SC					X			
WT-CS-04-117	2002390	04/17/2002	S	SC					X	-	1	
WT-CS-04-119	2002392	04/17/2002	S	SC					X			
WT-CS-04-121	2002394	04/17/2002	S	SC					X			
WT-CS-04-123	2002397	04/22/2002	S	SC					х		-	
WT-CS-04-123	2002398	04/22/2002	S	SC					x		-	
WT-CS-07-010	2002432	05/24/2002	S	SC					X			
WT-CS-07-012	2002435	05/28/2002	S	SC				1	х			
WT-CS-07-012	2002436	05/28/2002	S	SC					X			
WT-CS-07-014	2002440	05/29/2002	S	SC					X		-	
WT-CS-07-016	2002442	05/29/2002	S	SC					X			
WT-CS-07-018	2002445	05/29/2002	S	SC					X		1	
WT-CS-07-020	2002447	05/29/2002	S	SC					X			
WT-CS-07-022	2002449	05/29/2002	S	SC					X			
WT-CS-07-024	2002455	05/30/2002	S	SC					х			
WT-CS-07-025	2002459	05/30/2002	S	SC					х			
WT-CS-07-027	2002461	05/30/2002	S	SC					х		~	
WT-CS-08-043	2002406	05/20/2002	S	SC					х			
WT-CS-08-044	2002420	05/23/2002	S	SC					X			
WT-CS-08-045	2002421	05/23/2002	S	SC					X			
WT-CS-09-065	2002405	05/17/2002	S	SC					x			
WT-CS-09-066	2002407	05/22/2002	S	SC					X			
WT-CS-09-068	2002409	05/22/2002	S	SC					X			
WT-CS-09-070	2002411	05/22/2002	S	SC					X			
WT-CS-09-072	2002439	05/29/2002	S	SC					x			
WT-CS-09-073	2002452	05/30/2002	S	SC					х		,	
WT-CS-09-074	2002453	05/30/2002	S	SC					х			

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

Page

#### Table 3

#### SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION



#### Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling

Data

Loureiro Engineering Associates, Inc.

Sample	Information						Analysis I	nformation			
Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAVolatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
2002454	05/30/2002		SSC						x		
2002463	05/30/2002		SSC						X		
2002465	05/30/2002		SSC						X		
2002467	05/30/2002		SSC						X		
2002469	05/30/2002		SSC						x		
2002471	05/30/2002		SSC		<del></del>				X		
2002473	05/30/2002		SSC						X		
2002475	05/30/2002		SSC						X		
2002477	05/30/2002		SSC						X		
2002480	05/30/2002		SSC						X		
2002482	05/30/2002		SSC						X		
2002484	05/30/2002		SSC			1			X		
2002486	05/30/2002		SSC					-	X		
	Sample ID  2002454 2002463 2002465 2002467 2002469 2002471 2002473 2002477 2002480 2002482 2002484	2002454         05/30/2002           2002463         05/30/2002           2002465         05/30/2002           2002467         05/30/2002           2002469         05/30/2002           2002471         05/30/2002           2002473         05/30/2002           2002475         05/30/2002           2002477         05/30/2002           2002480         05/30/2002           2002482         05/30/2002           2002484         05/30/2002	Sample ID         Sample Date         Sampled Interval (ft)           2002454         05/30/2002           2002463         05/30/2002           2002465         05/30/2002           2002467         05/30/2002           2002469         05/30/2002           2002471         05/30/2002           2002473         05/30/2002           2002475         05/30/2002           2002477         05/30/2002           2002480         05/30/2002           2002482         05/30/2002           2002484         05/30/2002	Sample ID         Sample Date         Sampled Interval (ft)         Sample Class           2002454         05/30/2002         SSC           2002463         05/30/2002         SSC           2002465         05/30/2002         SSC           2002467         05/30/2002         SSC           2002469         05/30/2002         SSC           2002471         05/30/2002         SSC           2002473         05/30/2002         SSC           2002475         05/30/2002         SSC           2002477         05/30/2002         SSC           2002480         05/30/2002         SSC           2002482         05/30/2002         SSC           2002484         05/30/2002         SSC	Sample ID         Sample Date         Sampled Interval (ft)         Sample Class         LEAVolatiles           2002454         05/30/2002         SSC         SSC           2002463         05/30/2002         SSC           2002465         05/30/2002         SSC           2002467         05/30/2002         SSC           2002469         05/30/2002         SSC           2002471         05/30/2002         SSC           2002473         05/30/2002         SSC           2002475         05/30/2002         SSC           2002477         05/30/2002         SSC           2002480         05/30/2002         SSC           2002482         05/30/2002         SSC           2002484         05/30/2002         SSC	Sample ID         Sample Date         Sampled Interval (ft)         Sample Class         LEAVolatiles Organics         Volatile Organics           2002454         05/30/2002         SSC         SSC           2002463         05/30/2002         SSC         SSC           2002465         05/30/2002         SSC         SSC           2002467         05/30/2002         SSC         SSC           2002469         05/30/2002         SSC         SSC           2002471         05/30/2002         SSC         SSC           2002473         05/30/2002         SSC         SSC           2002475         05/30/2002         SSC         SSC           2002477         05/30/2002         SSC         SSC           2002480         05/30/2002         SSC         SSC           2002482         05/30/2002         SSC         SSC           2002484         05/30/2002         SSC         SSC	Sample ID         Sample Date         Sampled Interval (ft)         Sample Class         LEAVolatiles Organics         Volatile Organics         Semivolatile Organics           2002454         05/30/2002         SSC         SSC	Sample ID   Sample Date   Sample   Interval (ft)   Class   LEAVolatiles   Volatile   Organics   Herbicides	Sample Information   Sample Date   Sampled Interval (ft)   Class   LEAVolatiles   Organics   Organics   Herbicides   Pesticides	Sample Information   Sample Date   Sampled Interval (ft)   Class   LEAVolatiles   Organics   Semivolatile Organics   Herbicides   Pesticides   PCBs	Sample ID   Sample Date   Sampled Interval (ft)   Class   LEAVolatiles   Organics   Semivolatile   Organics   Herbicides   Pesticides   PCBs   Metals

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### Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling

Data							Loureiro Engineering Associates, Inc.			
	Location ID	WT-CS-02-066	WT-CS-02-067	WT-CS-02-069	WT-CS-02-071	WT-CS-02-072	WT-CS-02-074	WT-CS-02-076		
	Sample ID	2002366	2002367	2002369	2002377	2002378	2002380	2002382		
	Sample Date	04/09/2002	04/09/2002	04/09/2002	04/11/2002	04/11/2002	04/11/2002	04/11/2002		
	Sample Time	15:00	15:10	15:20	15:15	15:20	15:30	15:40		
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM		
	Lab. Number	E204450-1	E204450-2	E204450-4	E204529-1	E204529-2	E204529-4	E204529-6		
Constituent	Units									
Date PCBs Analyzed	-	04/11/2002	04/11/2002	04/11/2002	04/12/2002	04/12/2002	04/12/2002	04/12/2002		
PCB-1248 (Arochlor 1248)	ug/kg	530	150000	84000						
PCB-1254 (Arochlor 1254)	ug/kg	460	120000	64000	200	380	2200	18000		
PCB-1260 (Arochlor 1260)	ug/kg									
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### Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling Data

		Data				Loureiro Engineering Associates, Ind			
	Location ID	WT-CS-04-117	WT-CS-04-119	WT-CS-04-121	WT-CS-07-010	WT-CS-07-014	WT-CS-07-016	WT-CS-07-018	
	Sample ID	2002390	2002392	2002394	2002432	2002440	2002442	2002445	
	Sample Date	04/17/2002	04/17/2002	04/17/2002	05/24/2002	05/29/2002	05/29/2002	05/29/2002	
	Sample Time	11:00	11:20	11:40	16:47	11:30	11:42	11:55	
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM	
	Lab. Number	E204704-6	E204704-8	E204704-10	E205B11-1	E205B64-2	E205B64-4	E205B64-7	
Constituent	Units								
Date PCBs Analyzed	-	04/17/2002	04/17/2002	04/17/2002	05/29/2002	05/30/2002	05/30/2002	05/30/2002	
PCB-1248 (Arochlor 1248)	ug/kg	1100			8500		30000	66000	
PCB-1254 (Arochior 1254)	ug/kg	870	100	74	6500	2600	31000	60000	
PCB-1260 (Arochlor 1260)	ug/kg	240			2800		3900	17000	
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#### Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling

Data

Loureiro Engineering Associates, Iri

	Data					Loureiro Engineering Associates, Inc.   WT-CS-08-045   WT-CS-09-066   WT-CS-09-068   WT-CS-09-070				
	Location ID	WT-CS-07-020	WT-CS-07-022	WT-CS-08-044	WT-CS-08-045					
	Sample ID	2002447	2002449	2002420	2002421	2002407	2002409	2002411		
	Sample Date	05/29/2002	05/29/2002	05/23/2002	05/23/2002	05/22/2002	05/22/2002	05/22/2002		
	Sample Time	12:55	13:05	13:05	13:15	13:10	13:15	13:20		
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM		
	Lab. Number	E205B64-9	E205B64-11	E205988-1	E205988-2	E205928-1	E205928-3	E205928-5		
Constituent	Units				***************************************					
Date PCBs Analyzed	-	05/30/2002	05/30/2002	05/23/2002	05/23/2002	05/22/2002	05/23/2002	05/23/2002		
PCB-1248 (Arochlor 1248)	ug/kg			620	1400	3600				
PCB-1254 (Arochlor 1254)	ug/kg	13000	15000	620	1600	4500	200	45000		
PCB-1260 (Arochlor 1260)	ug/kg		1	210	780	1400				
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Printed on 06/17/2002



Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling
Data

Data Loureiro Engineering Associates, Inc									
	Location ID	WT-CS-09-076	WT-CS-09-078	WT-CS-09-080	WT-CS-09-084	WT-CS-09-086	WT-CS-09-088	WT-CS-09-090	
	Sample ID	2002463	2002465	2002467	2002471	2002473	2002475	2002477	
	Sample Date	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002	
	Sample Time	14:38	14:49	15:00	15:30	15:41	16:10	16:46	
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM	
1	Lab. Number	E205C73-1	E205C73-3	E205C73-5	E205C73-9	E205C73-11	E205C73-13	E205C73-15	
Constituent	Units								
Date PCBs Analyzed	-	06/03/2002	06/03/2002	06/03/2002	06/03/2002	06/03/2002	06/03/2002	06/04/2002	
PCB-1248 (Arochlor 1248)	ug/kg		11000		22000	12000		390	
PCB-1254 (Arochlor 1254)	ug/kg	5300	13000	2500	23000	14000	590	360	
PCB-1260 (Arochlor 1260)	ug/kg				6100	4600	180	57	
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#### Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling

Data Loureiro Engineering Associates, Inc. Location ID WT-CS-09-092 WT-CS-09-094 WT-CS-09-096 WT-CS-09-098 2002480 2002482 Sample ID 2002484 2002486 05/30/2002 Sample Date 05/30/2002 05/30/2002 05/30/2002 Sample Time 17:00 17:15 17:24 17:31 Laboratory PREM PREM PREM PREM Lab. Number E205C82-1 E205C82-3 E205C82-5 E205C82-7 Units Constituent Date PCBs Analyzed 05/31/2002 06/01/2002 06/01/2002 06/01/2002 PCB-1248 (Arochlor 1248) ug/kg PCB-1254 (Arochlor 1254) 310 ug/kg 420 120 42000 PCB-1260 (Arochlor 1260) ug/kg 480 12000

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#### US EPA New England RCRA Document Management System Image Target Sheet

RDMS Document ID	# <u>100460</u>
Facility Name: PRAT	TT & WHITNEY MAIN STREET
Facility ID#: CTD990	0672081
Phase Classification:	R-9
Purpose of Target Sh	eet:
[X] Oversized (in Sit	e File) [ ] Oversized (in Map Drawer)
[ ] Page(s) Missin	g (Please Specify Below)
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ATTACHMENT NO	ized Material, if applicable: D. 2 SHEET 1: UPPER POND AREAS OF FIGATION AND SAMPLING

<sup>\*</sup> Please Contact the EPA New England RCRA Records Center to View This Document \*

#### US EPA New England RCRA Document Management System Image Target Sheet

T 1114 NT			
Facility Name:	PRATT & WHI	INE	MAIN STREET
Facility ID#: <u>C</u>	TD990672081		
Phase Classific	ation: R-9		
Purpose of Tar	get Sheet:		
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#### US EPA New England RCRA Document Management System Image Target Sheet

KDMG Document II	D #_100460
Facility Name: <u>PRA</u>	ATT & WHITNEY MAIN STREET
Facility ID#: <u>CTD99</u>	90672081
Phase Classification	ı: <u>R-9</u>
Purpose of Target S	Sheet:
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<sup>\*</sup> Please Contact the EPA New England RCRA Records Center to View This Document \*

#### CONSENT ORDER SRD-130 UNITED TECHNOLOGIES CORPORATION PRATT & WHITNEY DIVISION QUARTERLY PROGRESS REPORT No. 4, JUNE 2002

Attachment No. 3

Dewatering Wastewater Analytical Data

## Table 1 SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Dewatering Wastewater Analytical Data

Sample Date  04/01/2002  04/08/2002  04/08/2002  04/15/2002  04/25/2002  05/02/2002  05/02/2002  05/03/2002  05/11/2002  05/18/2002  05/18/2002  05/24/2002  05/31/2002	Sampled Interval (ft)	Sample Class WWP WWP WWP WWP WWP WWP WWP WWP	LEAVolatiles	Volatile Organics X X X	Semivolatile Organics	Herbicides	Pesticides	PCBs  x x x x X X X	Metals X X X X	Miscellaneous Analyses
04/08/2002 04/15/2002 04/25/2002 04/30/2002 05/02/2002 05/03/2002 05/04/2002 05/11/2002 05/18/2002 05/18/2002 05/24/2002		WWP WWP WWP WWP WWP WWP		x x				x x X X	X X	
04/15/2002 04/25/2002 04/30/2002 05/02/2002 05/02/2002 05/03/2002 05/04/2002 05/11/2002 05/18/2002 05/18/2002 05/24/2002		WWP WWP WWP WWP WWP		x				X X X	X	
04/25/2002 04/30/2002 05/02/2002 05/02/2002 05/03/2002 05/04/2002 05/11/2002 05/18/2002 05/18/2002 05/24/2002		WWP WWP WWP WWP						X X		
04/30/2002 05/02/2002 05/02/2002 05/03/2002 05/04/2002 05/11/2002 05/18/2002 05/18/2002 05/24/2002		WWP WWP WWP WWP		X				X	X	
05/02/2002 05/02/2002 05/03/2002 05/04/2002 05/11/2002 05/18/2002 05/18/2002 05/24/2002		WWP WWP WWP								
05/02/2002 05/03/2002 05/04/2002 05/11/2002 05/18/2002 05/18/2002 05/24/2002		WWP WWP						v		
05/03/2002 05/04/2002 05/11/2002 05/18/2002 05/18/2002 05/24/2002		WWP WWP						Λ		
05/04/2002 05/11/2002 05/18/2002 05/18/2002 05/24/2002		WWP						X		
05/11/2002 05/18/2002 05/18/2002 05/24/2002								X		
05/18/2002 05/18/2002 05/24/2002		WWP		х				x	X	
05/18/2002 05/24/2002				Х				Х	X	
05/24/2002	-	WWP						х		
		WWP		х				X		
05/31/2002		WWP		X				Х		
1 05/51/2002		WWP		х				x		

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Dewatering Wastewater Analytical Data

						Loure	eiro Engineering	Associates, I
	Location ID	WT-EW-14-002	WT-EW-14-002	WT-EW-14-002	WT-EW-14-002	WT-EW-14-002	WT-EW-14-002	WT-EW-14-00
	Sample ID	2003051	2003052	2003053	2003054	2003054	2003054	2003055
	Sample Date	04/01/2002	04/08/2002	04/15/2002	04/25/2002	04/25/2002	04/25/2002	04/30/2002
	Sample Time	09:00	17:00	11:15	09:30	09:30	09:30	07:30
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E204026-1C	E204372-1C	E204606-1C	E204A04-1B	E204A04-1C	E204A04-2	E204B85-1
Constituent	Units			-			<u> </u>	
Date PCBs Analyzed		<u> </u>	<u> </u>		04/26/2002		04/26/2002	04/30/2002
Date Metals Analyzed	-	04/03/2002	04/11/2002	04/16/2002		04/26/2002		
Copper	mg/L	0.14	0.014	0.016		0.11		
Lead	mg/L	· · · · · · · · · · · · · · · · · · ·				0.064		
Zinc	mg/L	0.024	0.31	0.30		0.39	+	
PCB-1248 (Arochlor 1248)	ug/l				4.5		6.3	1.3
PCB-1254 (Arochlor 1254)	ug/l				5.6		8.1	1.2
PCB-1260 (Arochlor 1260)	ug/l				1.5	1	2.0	1
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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Dewatering Wastewater Analytical Data

Loureiro Engineering Associates, Inc. WT-EW-14-002 | WT-EW-14-002 | WT-EW-14-002 Location ID Sample ID 2003056 2003059 2003060 Sample Date 05/02/2002 05/04/2002 05/11/2002 08:05 Sample Time 12:38 08:10 Laboratory PREM PREM PREM Lab. Number E205067-1 E205218-1C E205512-1C Units Constituent 05/02/2002 Date PCBs Analyzed 05/16/2002 05/08/2002 Date Metals Analyzed 0.014 mg/L Copper Lead mg/L Zinc mg/L 0.023 0.054 ug/l PCB-1248 (Arochlor 1248) PCB-1254 (Arochlor 1254) ug/l 1.1 PCB-1260 (Arochlor 1260) ug/l

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# CONSENT ORDER SRD-130 UNITED TECHNOLOGIES CORPORATION PRATT & WHITNEY DIVISION QUARTERLY PROGRESS REPORT No. 4, JUNE 2002

Attachment No. 4

DEP Notification Regarding

Dewatering Wastewater Treatment System

Pratt & Whitney 400 Main Street East Hartford, CT 06108



May 2, 2002

State of Connecticut
Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127

Attn: Don Gonyea, Authorization Coordinator

RE: Emergency Authorization No. EA0100182R

United Technologies Corp., Pratt & Whitney Division

East Hartford, Connecticut

Dear Mr. Gonyea:

In accordance with VI. B.5) (b) of the above referenced Emergency Authorization (EA), Pratt & Whitney is herein notifying the State of Connecticut Department of Environmental Protection, Bureau of Water Management that an exceedance of the applicable pollutant limits defined in the EA was encountered during the compliance monitoring performed on April 25, 2002. The referenced EA authorizes discharge to the Pratt & Whitney, Colt Street treatment system approved through NPDES Permit No. CT0001376 or directly to Willow Brook. The discharge during this exceedance was directed through the Colt Street treatment facility.

The associated sampling was performed on April 25, 2002 and the analytical data was validated at 11:55 am on May 1, 2002. Upon receipt of the preliminary laboratory data on Monday, April 29 at 4:00 pm, the system was immediately shutdown and discharge ceased. An exceedance was encountered for total PCBs as follows:

	Concentration	ea Limit
Detected Constituents	Detected (ug/l)	( <u>ug/l)</u>
Total PCBs	11.6	0.5

Pursuant to the above referenced requirements, upon validation of the analytical data through the laboratory, verbal notification was immediately made by George Andrews of Loureiro Engineering Associates to you via telephone on May 1, 2002 at approximately 2:40 pm.

The subject discharge was previously sampled on April 15, 2002. No PCBs were detected during this sampling event as reflected in the respective DMR. On April 19, 2002, the groundwater extraction system and related treatment system were shut down to facilitate

DEP May 2, 2002 Page 2 of 2

mechanical and operational logistics at the site. The system was restarted on April 25, 2002. The above analytical data reflects the system restart sampling.

As discussed during your telephone conversation with Mr. Andrews, mitigative measures will be implemented on the treatment system consisting of the installation of a multi-media filtration unit that will be placed after the existing settling/filtration/air stripping processes. The multi-media filtration unit will consist of 4 - 2,000 +/- lb vessels with carbon, anthracite, and bentonite, which will be in place prior to the discharge to the Colt Street treatment facility. In addition and in accordance with your discussion with Mr. Andrews, the treatment system will be evaluated for bacterial growth, and if necessary, may be disinfected using an adequate concentration of a select oxidizer to mitigate the potential for bacterial carry-over through the treatment system. Details associated with the disinfection process will be finalized and communicated to the Department prior to initializing any activities.

Upon completion of the above measures, sampling in accordance with VI, B.4)(c) of the above referenced EA will immediately be performed upon restart the treatment system.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense.

Sincerely,

Lorin S. Sodell

Chief Manufacturing Engineer
Director of Facilities & Services

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# CONSENT ORDER SRD-130 UNITED TECHNOLOGIES CORPORATION PRATT & WHITNEY DIVISION QUARTERLY PROGRESS REPORT No. 4, JUNE 2002

Attachment No. 5

Disposal Characterization Sampling Analytical Data

#### Table 1

#### SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION



## Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Disposal Characterization Sampling Data

Loureiro Engineering Associates, Inc.

Sample Information					Loureiro Engineering Associates, Inc.  Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAVolatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
WT-DC-07-002	2002170	04/25/2002		SL		Z	-			X	T	X
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Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Disposal Characterization Sampling

	Data				Loureiro Engineering Associates, Inc.			
	Location ID	WT-DC-07-002	WT-DC-07-002	·				
	Sample ID	2002170	2002170					
	Sample Date	04/25/2002	04/25/2002	3				
	Sample Time	09:00	09:00					
	Laboratory	PREM	PREM					
	Lab. Number	E204A00-1A	E204A00-1B					
Constituent	Units							
Date PCBs Analyzed	-	04/26/2002						
Date of Metals TCLP Analysis	-		04/30/2002					
Date Physical Analyzed	-	04/26/2002						
Barium (TCLP)	mg/L		1.3					
Chromium, Total (TCLP)	mg/L		0.076					
Lead (TCLP)	mg/L	<del> </del>	0.15					
PCB-1248 (Arochlor 1248)	ug/kg	520000					ļ	
PCB-1254 (Arochlor 1254)	ug/kg	530000						
Ignitability	f	160						
Sulfide	mg/kg	1.5						
pH	ph un	7.1						
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